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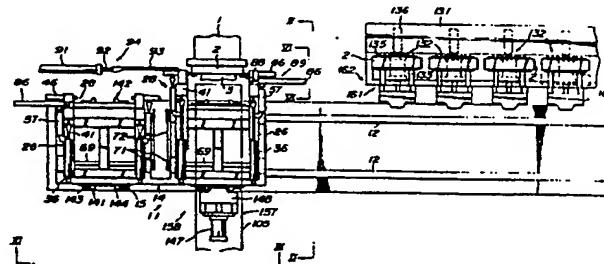
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### ㉓ Die assembly exchanging apparatus for extruder.

㉔ An apparatus (11) for exchanging die assemblies (2) for extruding a material from an extruder (1) comprises a carriage (14) on an extruding side of the extruder, carriage moving means (23) for moving the carriage in longitudinal directions along rails (12) perpendicular to an extruding direction of the material, two grasping units (28) supported on the carriage on the right and left sides, grasping unit moving means (36) for moving the grasping units in traverse directions parallel with the extruding direction, respectively, grasping unit vertical moving means (66) for moving the grasping units in vertical directions perpendicular to the longitudinal and traverse directions, respectively, and a plurality of storing stands (132) spaced apart from each other in the longitudinal direction for storing various kinds of die assemblies. Each of the grasping units extends in the vertical direction and has a pair of arms (41) provided with grasping means (51) for grasping one of the die assemblies.

EP 0 316 122 A3

FIG. 1





EP 88 31 0438

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim			
P, X	FR-A-2 601 619 (SWISS CAB E.A. SCHOEN S.A.) * Abstract; figures *	1,2,5,8	B 29 C 47/08		
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Y	US-A-4 652 410 (S. INOUE et al.) * Abstract; figures *	1-9			
Y	US-A-4 597 709 (K. YONEZAWA) * Figures *	1-9			
A	CAOUTCHOUCS & PLASTIQUES, vol. 62, no. 650, April 1985, pages 82-83, Paris, FR; "Metalmeccanica plast: le changement de moule n'est plus un problème" * Figures 1,3 *	1,2,6-8			
A	PATENT ABSTRACTS OF JAPAN, vol. 7, no. 31 (M-192)[1176], 8th February 1983; & JP-A-57 187 222 (NIPPON SEIKOSHO K.K.) 17-11-1982 ---	1-5			
A	PATENT ABSTRACTS OF JAPAN, vol. 8, no. 249 (M-338)[1686], 15th November 1984; & JP-A-59 124 823 (NIIGATA TEKKOSHIO K.K.) 19-07-1984 ---	1-5	TECHNICAL FIELDS SEARCHED (Int. Cl.4)		
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The present search report has been drawn up for all claims					
Place of search	Date of completion of the search	Examiner			
THE HAGUE	27-11-1989	BELIBEL C.			
CATEGORY OF CITED DOCUMENTS					
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document					
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DOCUMENTS CONSIDERED TO BE RELEVANT			
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A,D	PATENT ABSTRACTS OF JAPAN, vol. 10, no. 204 (M-499)[2260] , 17th July 1986; & JP-A-61 44 618 (YOKOHAMA RUBBER CO., LTD) 04-03-1986 -----	1	
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<p>The present search report has been drawn up for all claims</p>			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	27-11-1989	BELIBEL C.	
CATEGORY OF CITED DOCUMENTS		<p>T : theory or principle underlying the invention      E : earlier patent document, but published on, or      after the filing date      D : document cited in the application      L : document cited for other reasons      &amp; : member of the same patent family, corresponding      document</p>	
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